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(FILE 'HOME' ENTERED AT 15:42:56 ON 19 APR 2006)

FILE 'HCAPLUS' ENTERED AT 15:43:30 ON 19 APR 2006

E US20040265628/PN

L1 1 SEA ABB=ON PLU=ON US20040265628/PN
D ALL
SEL RN

FILE 'REGISTRY' ENTERED AT 15:44:13 ON 19 APR 2006

L2 15 SEA ABB=ON PLU=ON (14302-87-5/BI OR 14701-21-4/BI OR
14701-22-5/BI OR 15158-11-9/BI OR 168646-54-6/BI OR
22537-48-0/BI OR 23713-49-7/BI OR 27318-90-7/BI OR
642-31-9/BI OR 713489-13-5/BI OR 74-88-4/BI OR
777905-81-4/BI OR 777905-87-0/BI OR 816418-48-1/BI OR
98-98-6/BI)
D SCAN
D L2 1-15 RN STR

FILE 'HCAPLUS' ENTERED AT 15:47:54 ON 19 APR 2006

D SCAN L1

FILE 'LREGISTRY' ENTERED AT 15:55:59 ON 19 APR 2006

L3 STR 816418-48-1

FILE 'REGISTRY' ENTERED AT 15:59:14 ON 19 APR 2006

L4 2 SEA SSS SAM L3
D SCAN
L5 SCR 1918 OR 2043
L6 2 SEA SSS SAM L3 NOT L5
D SCAN

FILE 'LREGISTRY' ENTERED AT 16:06:05 ON 19 APR 2006

L7 STR 816418-48-1

FILE 'REGISTRY' ENTERED AT 16:10:15 ON 19 APR 2006

L8 7 SEA SSS SAM L7
D SCAN
L9 SCR 1842
L10 5 SEA SSS SAM L7 AND L9 NOT L5
D SCAN
L11 697 SEA SSS FUL L7 AND L9 NOT L5
SAV L11 MES685/A
L12 4 SEA ABB=ON PLU=ON L11 AND 1/N
D SCAN
L13 2 SEA ABB=ON PLU=ON L12 NOT 2-10/N
D SCAN
L14 4 SEA ABB=ON PLU=ON L2 AND L11
D SCAN
D SCAN L2

FILE 'LREGISTRY' ENTERED AT 16:16:12 ON 19 APR 2006

L15 STR L7

FILE 'REGISTRY' ENTERED AT 16:17:02 ON 19 APR 2006

L16 8 SEA SUB=L11 SSS SAM L15
D SCAN
L17 121 SEA SUB=L11 SSS FUL L15
SAV L17 MES685A/A

FILE 'HCAPLUS' ENTERED AT 16:19:07 ON 19 APR 2006

L18 6 SEA ABB=ON PLU=ON L14
L19 111 SEA ABB=ON PLU=ON L17
L20 279 SEA ABB=ON PLU=ON L11
L21 279132 SEA ABB=ON PLU=ON ?LUMINES? OR (PHOTO OR ELECTRO) (A) L

ERIC 1700 Search
May

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UMINES?
L22      68 SEA ABB=ON PLU=ON L21 AND L20
L23      5 SEA ABB=ON PLU=ON L18 AND L21
L24      54 SEA ABB=ON PLU=ON L19 AND L21
L25      68 SEA ABB=ON PLU=ON (L22 OR L23 OR L24)
L26      QUE ABB=ON PLU=ON EL OR E(W)L OR L(W)E(W)D OR OLED
          OR ELECTROLUM!N? OR ORGANOLUM!N? OR (ELECTRO OR ORGANO
          OR ORG#) (2A)LUM!N? OR LIGHT?(2A) (EMIT? OR EMISSION? OR
          SOURCE?)
L27      QUE ABB=ON PLU=ON (LUMINES##### OR FLUORES? OR
          PHOSPHORES?)/BI,AB OR LED/IT OR PHOSPHOR# OR LUMIN?
L28      26 SEA ABB=ON PLU=ON L20 AND L26
L29      95 SEA ABB=ON PLU=ON L20 AND L27
L30      15 SEA ABB=ON PLU=ON L19 AND L26
L31      67 SEA ABB=ON PLU=ON L19 AND L27
L32      6 SEA ABB=ON PLU=ON L18 AND (L26 OR L27)
L33      18 SEA ABB=ON PLU=ON L18 OR L23 OR L30 OR L32
L34      100 SEA ABB=ON PLU=ON (L22 OR L23 OR L24 OR L25) OR (L28
          OR L29 OR L30 OR L31 OR L32)

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L35      FILE 'LREGISTRY' ENTERED AT 16:37:27 ON 19 APR 2006
          STR L7

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L36      FILE 'REGISTRY' ENTERED AT 16:40:30 ON 19 APR 2006
          32 SEA SUB=L11 SSS SAM L35
          D SCAN
L37      633 SEA SUB=L11 SSS FUL L35
          SAV L37 MES685B/A

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L38      FILE 'HCAPLUS' ENTERED AT 16:42:58 ON 19 APR 2006
          262 SEA ABB=ON PLU=ON L37
L39      67 SEA ABB=ON PLU=ON L38 AND L21
L40      1 SEA ABB=ON PLU=ON L22 NOT L39
          D SCAN
          D HITSTR
L41      100 SEA ABB=ON PLU=ON L25 OR L34 OR L39

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FILE 'REGISTRY' ENTERED AT 16:55:33 ON 19 APR 2006
D SCAN L14

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L42      FILE 'HCAPLUS' ENTERED AT 16:56:20 ON 19 APR 2006
          63 SEA ABB=ON PLU=ON L41 AND 1840-2003/PY
L43      6 SEA ABB=ON PLU=ON L23 OR L32
L44      63 SEA ABB=ON PLU=ON L42 NOT L43
L45      QUE ABB=ON PLU=ON PRODUC? OR PROD# OR GENERAT? OR
          MANUF? OR MFR# OR CREAT? OR FORM## OR FORMING# OR
          FORMAT? OR MAKE# OR MADE# OR MAKING# OR FABRICAT? OR
          SYNTHESI? OR PREPAR? OR PREP#
L46      55 SEA ABB=ON PLU=ON L44 AND L45
L47      35 SEA ABB=ON PLU=ON L46 AND L21
L48      20 SEA ABB=ON PLU=ON L46 NOT L47
L49      8 S L42 NOT L46

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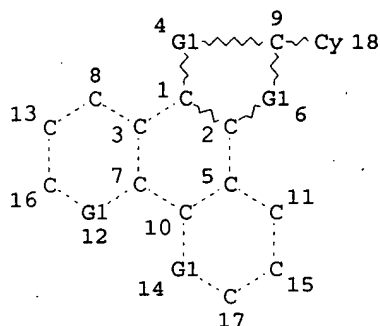
=> => d que stat l18

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L2      15 SEA FILE=REGISTRY ABB=ON PLU=ON (14302-87-5/BI OR
          14701-21-4/BI OR 14701-22-5/BI OR 15158-11-9/BI OR
          168646-54-6/BI OR 22537-48-0/BI OR 23713-49-7/BI OR
          27318-90-7/BI OR 642-31-9/BI OR 713489-13-5/BI OR
          74-88-4/BI OR 777905-81-4/BI OR 777905-87-0/BI OR
          816418-48-1/BI OR 98-98-6/BI)
L5      SCR 1918 OR 2043
L7      STR

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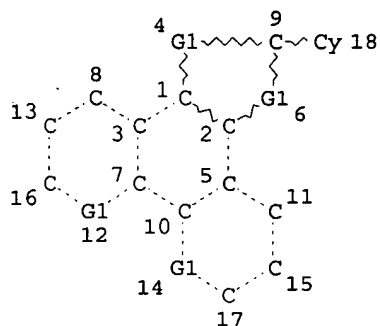
VAR G1=C/N
 NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 18

STEREO ATTRIBUTES: NONE
 L9 SCR 1842
 L11 697 SEA FILE=REGISTRY SSS FUL L7 AND L9 NOT L5
 L14 4 SEA FILE=REGISTRY ABB=ON PLU=ON L2 AND L11
 L18 6 SEA FILE=HCAPLUS ABB=ON PLU=ON L14

=> d l18 1-6 ibib abs hitstr hitind

L18 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2006:121702 HCAPLUS
 TITLE: Ruthenium(II) complex of 2-(9-anthryl)-1H-imidazo[4,5-f][1,10]phenanthroline: synthesis, spectrophotometric pH titrations and DNA interaction
 AUTHOR(S): Han, Mei-Jiao; Gao, Li-Hua; Wang, Ke-Zhi
 CORPORATE SOURCE: Department of Chemistry and Key Laboratory of Radiopharmaceuticals, Ministry of Education, Beijing Normal University, Beijing, 100875, Peop. Rep. China
 SOURCE: New Journal of Chemistry (2006), 30(2), 208-214
 CODEN: NJCHE5; ISSN: 1144-0546
 PUBLISHER: Royal Society of Chemistry
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB A Ru(II) complex of [(bpy)2Ru(aip)](ClO4)2·H2O (bpy = 2,2'-bipyridine, aip = 2-(9-anthryl)-1H-imidazo[4,5-f][1,10]phenanthroline) was newly synthesized. The ground- and excited-state acid-base properties of the complex were studied by UV-visible and emission spectrophotometric pH titrns. The excited-state ionization consts. of pKa1* = 2.57, pKa2* = 8.47 are comparable to and 1.3 orders of magnitude greater than the ground-state ones, resp. The interaction of the complex with calf thymus DNA was studied by UV-visible and emission spectroscopy, steady-state emission quenching by [Fe(CN)6]4-, competitive binding with ethidium bromide, reverse salt titrns., DNA melting expts., as well as viscosity measurements. The complex bound to the DNA by interaction of the anthryl moiety of the complex with an intrinsic binding constant of the order of 104 M-1 in buffered 50 mM NaCl at room temperature, and nonelectrostatic binding free energy



VAR G1=C/N

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 18

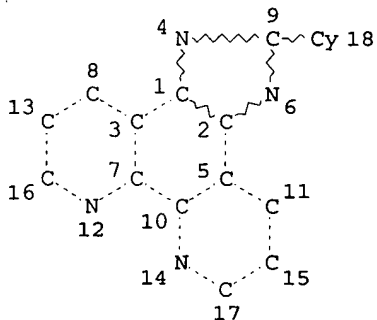
STEREO ATTRIBUTES: NONE

L9 SCR 1842

L11 697 SEA FILE=REGISTRY SSS FUL L7 AND L9 NOT L5

L14 4 SEA FILE=REGISTRY ABB=ON PLU=ON L2 AND L11

L15 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 18

STEREO ATTRIBUTES: NONE

L17 121 SEA FILE=REGISTRY SUB=L11 SSS FUL L15

L18 6 SEA FILE=HCAPLUS ABB=ON PLU=ON L14

L19 111 SEA FILE=HCAPLUS ABB=ON PLU=ON L17

L20 279 SEA FILE=HCAPLUS ABB=ON PLU=ON L11

L21 279132 SEA FILE=HCAPLUS ABB=ON PLU=ON ?LUMINES? OR (PHOTO
OR ELECTRO) (A) LUMINES?

L22 68 SEA FILE=HCAPLUS ABB=ON PLU=ON L21 AND L20

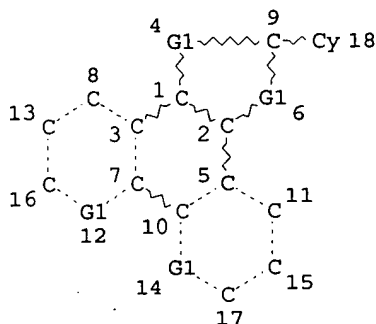
L23 5 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND L21

L24 54 SEA FILE=HCAPLUS ABB=ON PLU=ON L19 AND L21

L25 68 SEA FILE=HCAPLUS ABB=ON PLU=ON (L22 OR L23 OR L24)

L26 QUE ABB=ON PLU=ON EL OR E(W)L OR L(W)E(W)D OR OLED O
R ELECTROLUM!N? OR ORGANOLUM!N? OR (ELECTRO OR ORGANO O
R ORG#) (2A) LUM!N? OR LIGHT? (2A) (EMIT? OR EMISSION? OR S

L27 SOURCE?)
 QUE ABB=ON PLU=ON (LUMINES##### OR FLUORES? OR PHO
 SPHORES?)/BI,AB OR LED/IT OR PHOSPHOR# OR LUMIN?
 L28 26 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 AND L26
 L29 95 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 AND L27
 L30 15 SEA FILE=HCAPLUS ABB=ON PLU=ON L19 AND L26
 L31 67 SEA FILE=HCAPLUS ABB=ON PLU=ON L19 AND L27
 L32 6 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND (L26 OR L27)
 L34 100 SEA FILE=HCAPLUS ABB=ON PLU=ON (L22 OR L23 OR L24 OR
 L25) OR (L28 OR L29 OR L30 OR L31 OR L32)
 L35 STR



VAR G1=C/N
 NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 GGCAT IS UNS AT 18
 DEFAULT ECLEVEL IS LIMITED
 ECOUNT IS M5-X16 C M0-X2 N AT 18

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 18

STEREO ATTRIBUTES: NONE

L37 633 SEA FILE=REGISTRY SUB=L11 SSS FUL L35
 L38 262 SEA FILE=HCAPLUS ABB=ON PLU=ON L37
 L39 67 SEA FILE=HCAPLUS ABB=ON PLU=ON L38 AND L21
 L41 100 SEA FILE=HCAPLUS ABB=ON PLU=ON L25 OR L34 OR L39
 L42 63 SEA FILE=HCAPLUS ABB=ON PLU=ON L41 AND 1840-2003/PY
 L43 6 SEA FILE=HCAPLUS ABB=ON PLU=ON L23 OR L32
 L44 63 SEA FILE=HCAPLUS ABB=ON PLU=ON L42 NOT L43
 L45 QUE ABB=ON PLU=ON PRODUC? OR PROD# OR GENERAT? OR MA
 NUF? OR MFR# OR CREAT? OR FORM## OR FORMING# OR FORMAT?
 OR MAKE# OR MADE# OR MAKING# OR FABRICAT? OR SYNTHESI?
 OR PREPAR? OR PREP#
 L46 55 SEA FILE=HCAPLUS ABB=ON PLU=ON L44 AND L45
 L47 35 SEA FILE=HCAPLUS ABB=ON PLU=ON L46 AND L21

=> d 147 1-35 ibib abs hitstr hitind

L47 ANSWER 1 OF 35 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:85642 HCAPLUS

DOCUMENT NUMBER: 141:309896

TITLE: **Synthesis** and characteristics of two
 new Ni-phenanthroline **fluorescence**
 probe for nucleic acid determination

AUTHOR(S): Zhuang, Hui-sheng; Guo, Chun-hua; Chen, Peng;
 Wang, Qiong-e; Chen, Guo-nan

CORPORATE SOURCE: Coll. of Environ. Sci. and Eng., Donghua
 Univ., Shanghai, 250001, Peop. Rep. China

SOURCE: Huaxue Shiji (2003), 25(6), 325-328